

# Cross analysis of literature and clinical guidelines regarding psychiatric electroceutical interventions (PEIs) with practical concerns of psychiatrists

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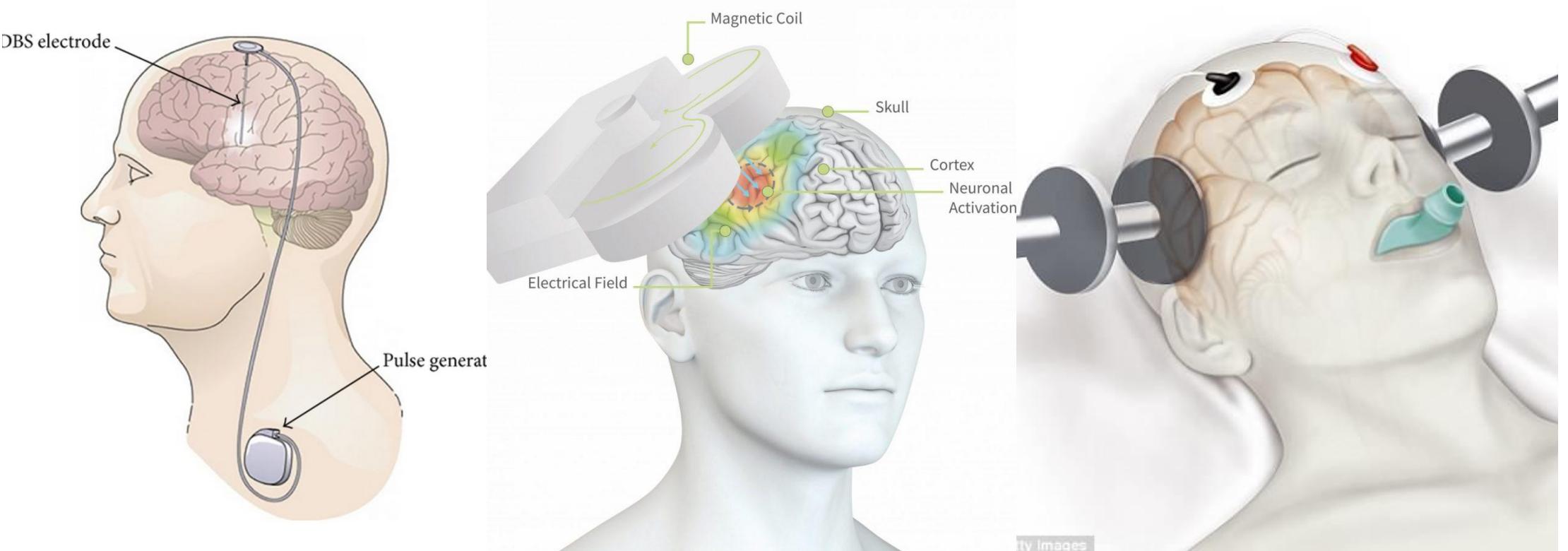
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## Introduction

Psychiatric electroceutical interventions (PEIs) are potential treatment options for patients with severe depression and for whom first-line treatments have failed. Already FDA approved PEIs include electroconvulsive therapy (ECT) and transcranial magnetic stimulation (TMS), while others, like deep brain stimulation (DBS), are still in development for psychiatric treatment. While the ethics literature and current guidelines discuss ways to improve clinical employment of these interventions, little research evaluates the relationship between these guidelines and the concerns of practicing psychiatrists.

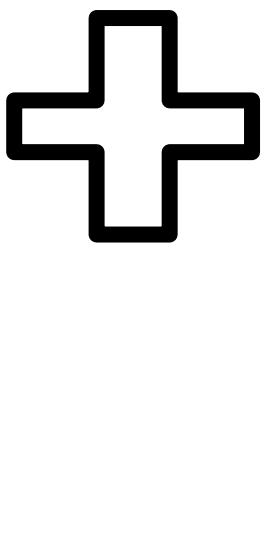


## Research Aims

Compare the neuro-ethics literature and current clinical guidelines for the use of these PEIs for depression with the views and concerns mentioned by psychiatrists during our interviews. We aim to identify divergences in the PEI literature with practical concerns from psychiatrists to better align clinical practices.

## Methods

We reviewed available neuro-ethics literature and clinical and research guidelines literature covering ECT, TMS and DBS

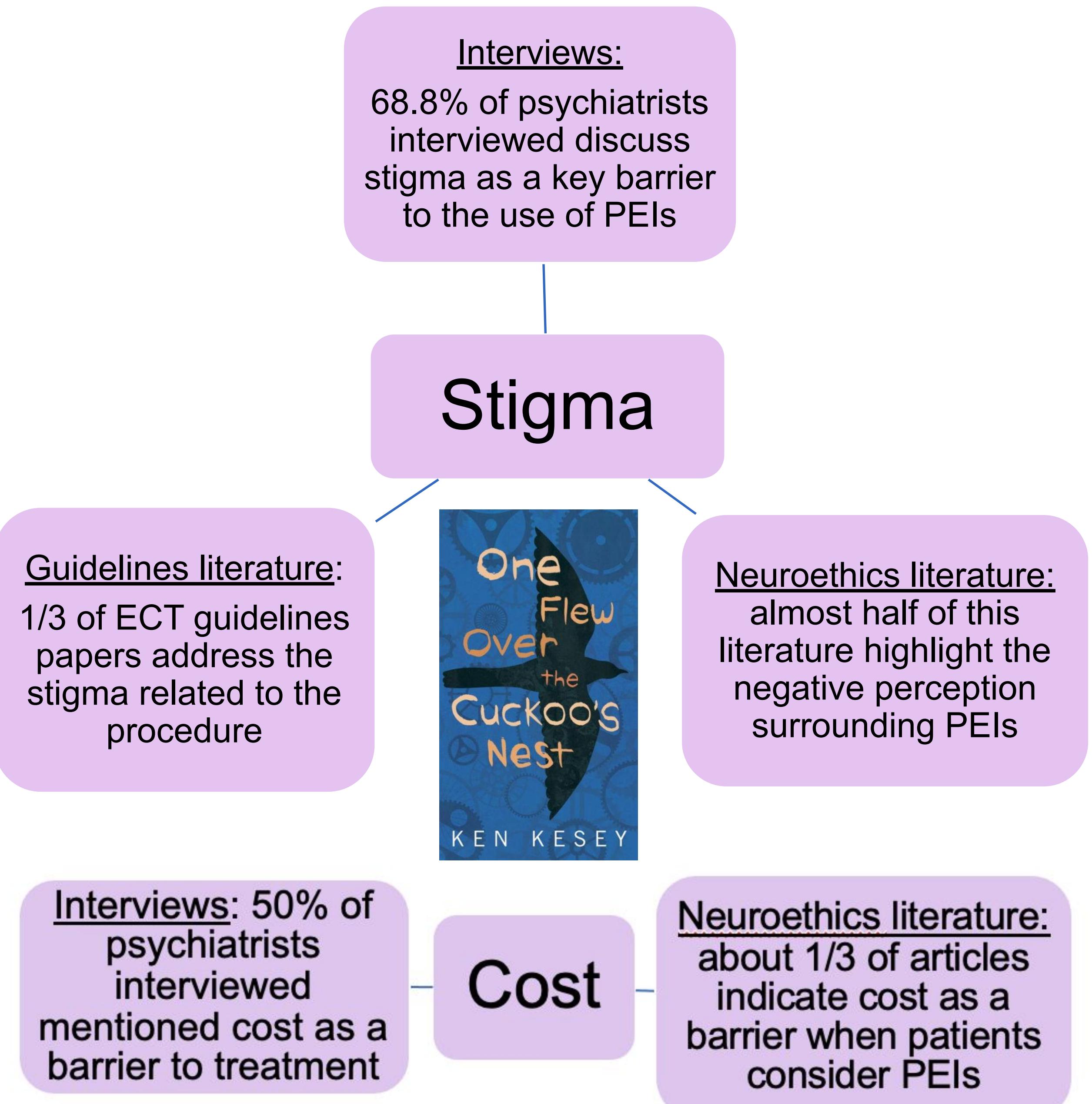


We held semi-structure interviews with 16 psychiatrists across Michigan about their views and concerns regarding these PEIs

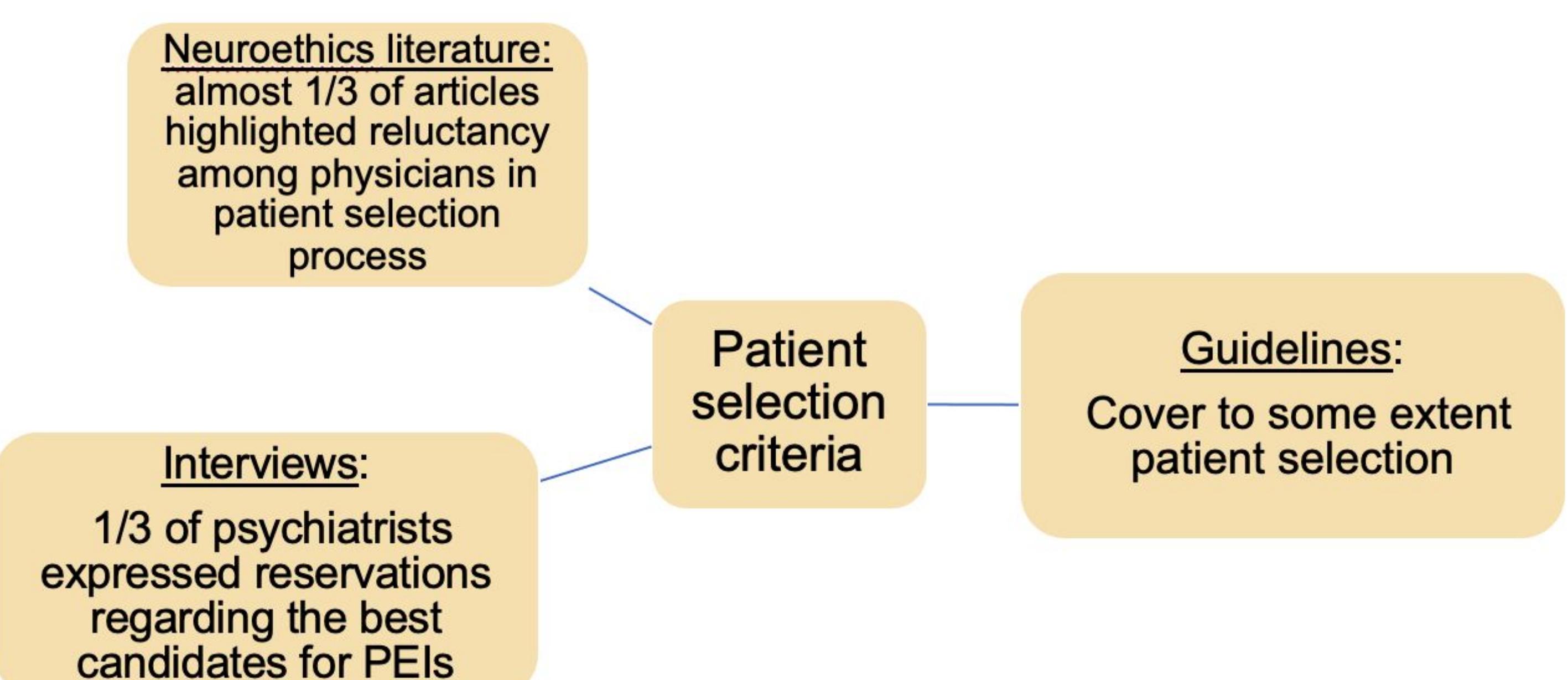
We cross-analyzed our results from previous two steps

## Results

### Areas of Agreement



### Areas of Disagreement



## Discussion

- All data sources addressed the stigma associated with PEIs
  - Both neuroethics literature and interviews stressed the controversial history of psychosurgery and the negative depictions in film and media to contribute to misconceptions with PEIs
  - ECT guidelines mentioned stigma to underscore how these technologies remain misunderstood
- Neuro-ethics literature and our interviews suggest cost is a burden for patients considering these treatments
  - The literature stresses that cost of these therapies can deter patients from using PEIs
  - Psychiatrists specifically noted cost as an issue for implantable PEIs, while mentioning insurance coverage for TMS as a barrier
- Interviewed psychiatrists and the neuroethics literature diverge from clinical guidelines when it comes to patient selection criteria
  - Clinical guidelines literature covers patient eligibility criteria and employment of ECT and TMS
  - Yet, literature and the interviews reflect that there is still doubt in when to provide these interventions and who is the best candidate for them

These results suggest a possible education gap regarding information, which is key in light of new evidence regarding ECT and TMS modalities and protocols.

## Conclusions

Our analysis suggests that more needs to be done to relieve the impact of cost and the stigma associated with these PEIs. It is also possible that while past guidelines covered patient eligibility criteria and appropriate timing of employment, the use of new PEI modalities and protocols call for revisions of clinical guidelines.

## Future Steps

Our next steps include integrating results presented here with those of our national survey to inform the development of an analytic map. This will allow us to better anticipate ethical issues and strategize innovative methods to tackle these issues.

## Acknowledgements

We thank our other team members: Maryssa M.C. Gilbert, Marissa Cortright, Megan Penzkofer and Emily Castillo. We would like to thank the National Institutes of Health-BRAIN Initiative for funding this project (#1RF1MH117802-01).